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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,271	03/21/2001	Shen Ye	10467.51US01	3973

7590 09/23/2002
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EXAMINER

LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

814271

Applicant(s)

Ye, Shen

Examiner

B. Lee

Group Art Unit

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—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-18 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-3, 5-10, 12-16 is/are rejected.
- ☒ Claim(s) 4, 11, 17, 18 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 21 March 2001 is/are objected to by the Examiner.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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The disclosure is objected to because of the following informalities: Page 3, line 7, note that "1(a)-d" should be rewritten as --1(a), 1(b), ~~1(c)~~, 1(d), --; lines 19-22, note that use of reference numbers (~~730~~, ~~630~~, ~~830~~, ~~850~~) is not appropriate for the brief description of the drawings and should be deleted therefrom. Page 6, line 6, should "430" correctly be --~~230~~--?; lines 8, 10, 12, 13, should "I₂" and "I₁" correctly be --~~I₂~~-- and --~~I₁~~--, respectively? Page 7, lines 11, 12, 13, note that reference to Figures "5, 6" should properly refer to figures -- 5(a), ~~5(b)~~ -- and -- 6(a), ~~6(b)~~ --, respectively. Page 7, line 20 through page 8, line 1 and page 8, lines 9-13, note that the description of the labeled features in these drawing figures is not commensurate with the reference labels used therein. Page 8, line 5, note that "Figure 5" should properly be -- Figure 5(b) --; line 6, note that "Figure 6" should properly be -- Figure 6(b) --; line 20; note that "Figure 6" should properly be -- Figure 6(a) --. Page 9, lines 1, 2, 3, note that Figures "9, 10" should properly refer to Figures -- 9(a), ~~9(b)~~ -- and -- 10(a), ~~10(b)~~ --, respectively. Page 10, line 7, note that "multiplayer" should correctly be -- multi-layered --; line 8, note that "dramitacally" should be -- dramatically --; line 14, note that --1240-- should precede each one of (~~A~~, ~~B~~, ~~C~~, ~~D~~), respectively; line 17, similarly --1220-- should precede each one of (~~B~~, ~~C~~, ~~D~~, ~~E~~), respectively and note that "beidentical" should be separated. Page 11, line 4, note that --1230-- should precede each one of (~~B~~, ~~C~~, ~~D~~, ~~E~~), respectively. Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that the following reference labels in the indicated drawing figures need to be correspondingly described in the specifications description of such drawing figures: figs 1(a)-1(d), in their entirety; fig. 2 (~~1~~),

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~~②~~, long/short transmission line); figs. 3,4, (+,-); fig. 9(a), (900, 910, 930); fig. 10(a), (1000, 1010); fig. 11 {1110, Layer (1, 2, 3)}. Appropriate correction is required.

The use of the trademark Duroid (page 7, line 7) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The drawings are objected to because of the following: In fig. 4, reference label --I₃-- needs to be labeled; In figs. 6(a), 7(a), note that reference labels therein do not appear to correspond to reference labels used in the specification description of these drawing figures; In fig. 11, reference label -- 1130 -- needs to be provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179

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USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

The attempt to incorporate subject matter into this application by reference to U.S. Patent applications ~~706974~~, 40578, and 679783, respectively is improper because it has not yet been established as to whether all three of the cited applications have either been allowed or patent to permit proper incorporation by reference of "essential material".

Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, note that it is unclear what constitutes the full scope of coverage encompassed by the recitation "...is at least partially formed". Clarification is needed.

The following claims have been found objectionable for reasons set forth below:

In claim 4, note that -- of the two ~~segments~~ -- should follow "other" for clarity of description.

In claims ~~7~~, ~~15~~, note that "made" should be rephrased as -- comprised -- for clarity of description.

In claims 10, 16, note that -- ~~one of~~ -- should precede "magnesium" and "or" should be rewritten as -- ~~and~~ -- for a proper characterization.

In claim ~~14~~, note that "formed" should be rewritten as -- disposed -- for clarity.

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Claims 12, 13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Note that the added subject matter of dependent claims 12 and 13 renders these claims more comprehensive (i.e. filter) than the subject matter of independent claim 1 (i.e. strip line circuit). Thus, a more comprehensive dependent claim fails to further limit the subject matter of the less comprehensive independent claim, from which these claims respectively directly depend.

A person shall be entitled to a patent unless-

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Okamura et al.

Note that Fig. 19 discloses a strip-line circuit (4a, 4b, 4c, 4d) formed as a closed conductive loop (4) disposed on a multi-layer substrate structure (1) having multiple dielectric layers interposed with conductive loops at nodes are transmission lines (6, 7) which are arranged such that the conductive loop is divided into segments of different length which inherently provides segments of different impedance. Moreover, note that an inherent shunt capacitance is provided between the closed loop conductor (4) and the ground plane (5).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al and Takahashi et al taken in combination.

Takahashi et al (Fig. 8) discloses a filter (81) comprising at least two closed loop conductors (33) having input/output nodes with transmission line coupling (32, 83, 34).

As disclosed in Okamura et al, fig. 19 thereof, a closed conductive loop to effect a shunt capacitor with a ground electrode is provided.

Accordingly, it would have been obvious in view of the references taken together to have realized the filter of close conductive loop in Takahashi et al (fig. 8) to have been the specific configuration taught by Okamura (fig. 19). Such a modification would have been considered an obvious substitution of art recognized conductive loop structures, thereby suggesting the obviousness of such a combination.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al in view of Schmidt et al.

Schmidt et al discloses that an oxide superconductor is disposed on a lanthanum aluminate substrate to realize a filtering structure.

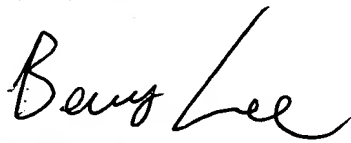
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Accordingly the Okamura et al structure being realized as an oxide superconductor on a lanthanum aluminate substrate would have been obvious, especially since it would have imparted such low loss characteristics to such a configuration.

Claims 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above rejection as applied to claim 14 above, and further in view of Schmidt et al.

Likewise, for reasons set forth above, it would have been obvious to have further modified the above combination such as to have included the recited superconductor and dielectric material.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (703) 308-4902.



BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817

B LEE/pj

09/19/02